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ABSTRACT

The Classroom Management Improvement Study (CMIS) was designed to investigate a complex staff development effort in order to provide a clear explication of the treatment in the evert that either researchers or practitioners desired to replicate the intervention. The treatment was directed toward introducing effective classroom management procedures to teachers. It consisted of a workshop prior to the beginning of school, a manual of management prescriptions, and a reinforcement workshop 4 weeks after school began. Results show that, prior to the treatment, there was no statistically significant difference between treatment and control teachers' knowledge of classroom management as defined by the CMIS study. Afterwards, treatment teachers exhibited significantly more desired classroom management behaviors than did control teachers. The reinforcement workshop appeared to have little or no effect on treatment teachers' management behaviors other than maintenance. A group of control teachers received a mid-year treatment; results suggested that the mid-year treatment was not as effective as that given prior to the beginning of school. Speculations are made concerning the utility of the CMIS treatment for staff development programs for teachers. (Author/JD)

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Knowledge, Training, and Classroom Management

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Knowledge, Training, and Classroom Management

Abstract

This paper describes and reports the consequences of a staff development effort designed by the Classroom Organization and Effective Teaching (COET) program area of the Research and Development Center for Teacher Education at the University of Texas at Austin. This staff development effort was directed toward introducing effective classroom management procedures into the classrooms of participating teachers. The treatment, consisting of a workshop prior to the beginning of school, a manual of management prescriptions, and a reinforcement workshop 4 weeks after school began, is described. Results show that prior to the treatment there was no statistically significant difference between treatment and control teachers' knowledge of classroom management as defined by the CMIS study. However, after the treatment, treatment teachers exhibited significantly more desired classroom management behaviors than did control teachers. The reinforcement workshop appeared to have little or no effect on treatment teachers' classroom management other than, perhaps, maintenance. A group of control teachers were selected to receive a mid-year treatment; results suggested that the mid-year treatment was not as effective in introducing effective management procedures into the classroom as the treatment given to teachers prior to the beginning of school. Finally, speculations are made concerning the utility of the CMIS treatment for staff development programs for teachers.

Knowledge, Training, and Classroom Management

The purpose of this paper is to describe and report the consequences of a staff development effort designed to introduce effective classroom management procedures into the classrooms of participating teachers. This experimental study, the Classroom Management Improvement Study (CMIS), was an activity of the Classroom Organization and Effective Teaching (COET) program area of the Research and Development Center for Teacher Education at the University of Texas at Austin.

The general purpose of the study was to investigate a complex staff development effort in order to provide a clear explication of the treatment in the event that either researchers or practitioners desired to replicate the intervention.

Consequently, a set of procedures was designed to document the treatment and to provide a substantive base from which conclusions about the effects of the treatment could be inferred. The results of this effort are reported below.

Purposes of the Study

The specific purposes of this study were to:

1. Document the treatment provided to teachers in the CMIS study.

2. Determine the relation of entry knowledge of classroom management to subsequent classroom management behavior for both treatment and control teachers.

3. Examine the relative effects of beginning-of-year treatment with mid-year treatment.

4. Speculate upon the utility of CMIS treatment for the practices of staff development programs for teachers.

Procedures

As noted above, this inquiry was intended as an extension of the research design of the CMIS study. The details of the larger study are reported elsewhere (Emmer, Sanford, Evertson, Clements, & Martin, Note 1). For the purposes of this paper it can be noted that the CMIS effort was a natural outgrowth of COET's prior work which demonstrated the correlation of certain teacher classroom management behaviors with positive pupil outcomes as measured by standardized achievement tests. These teacher behaviors were translated into a treatment (see below) and 41 teacher volunteers were randomly assigned to either a treatment or a control group. Systematic and extensive observations of the teachers in both groups were made over a 6 month period, with particular emphasis placed upon the first 8 weeks of the school year. The CMIS data collection procedures included classroom narratives, student engagement ratings, component ratings (assessments of student and teacher behaviors in relation to a set of classroom management and instructional variables), time logs indicating duration of classroom events, observer summary ratings, and ratings of narratives subsequent to the transcription of classroom observations.

Data Collection

For the purposes of the present study, several data collection procedures were added to those described above. Descriptions and rationales for each appear below.

Classroom management knowledge questionnaire. Although the CMIS design called for random assignment of teachers to experimental or control groups, it was considered desirable to determine if, indeed, the random assignment provided relatively comparable groups in terms of what

members knew about classroom management. There were two principal reasons for this check on the comparability of the two groups. First, the number of participants was only marginally large enough to assume the full effect of random assignment. Second, the districts in which the CMIS study was conducted had a history of involvement with related COET efforts and it was possible that some of the teachers had greater prior knowledge of the COET work than others. Therefore, a content analysis of the information to be provided in the treatment materials was conducted and a questionnaire based upon that analysis was constructed. The questionnaire, consisting of 14 open-ended items, was distributed to treatment teachers who were instructed to complete it before the treatment and give it to COET staff members. The control teachers completed the questionnaire prior to their participation later in the school year in workshops designed specifically for them.

Q-sort of questionnaire responses. COET staff advised us that a logical grouping of classroom management behaviors, in terms of the CMIS study, would be (a) planning, (b) behavior management, and (c) instructional management. Therefore, the questionnaire responses from both treatment and control groups were transferred to 5x8 cards and grouped according to these three constructs. Three staff members of the COET program, expert in the content and processes of the CMIS study, sorted the responses according to the degree to which they reflected expectations built into the treatment. A separate sorting was done for each of the three constructs. Reliability of the scores was obtained by providing the three sorters with card sets including same and different responses. Inter-rater reliability was .92 for planning, .72 for behavior management, and .73 for instructional management. Inter-

correlations among the three subscales produced $r = .51$ for planning and behavior management, $r = .31$ for planning and instructional management, and $r = .39$ for behavior management and instructional management.

Telephone interviews with treatment teacher. After attending the first workshop, each treatment teacher was interviewed by telephone to determine the degree to which he/she had found the content of the treatment useful and/or valuable and the degree to which the procedures used in the treatment were considered valuable and/or desirable. This was considered important because the treatment called for a second reinforcement workshop after 4 weeks of school and the COET staff wanted that workshop to reflect the practices considered most effective by participants in the study. Staff were also very interested in finding out the degree of initial implementation of the treatment as perceived by these teachers.

Observation of treatment. Because a major component of the treatment consisted of two workshops for participating teachers, it was decided that detailed observations of the workshops would give a firm descriptive basis upon which to construct an analysis of the treatment. Two trained observers recorded and transcribed the events of the workshops with particular attention given to the behaviors of the workshop leaders, the responses of the participants and interactions among members of the group.

Description of the CMIS Treatment

The CMIS treatment consisted of three principal components: a 3 1/2 hour workshop during the week prior to the opening of school, a manual containing research-based recommendations on desired classroom management strategies and behaviors, and a 2 1/2 hour workshop during

the fifth week of school. Each of these treatment components will be described in turn.

Preschool Workshop

The first workshop was held in a conference center located on the nearby university campus. The purpose of the workshop was to introduce treatment teachers to the desired classroom management behaviors through the use of a variety of staff development strategies. The physical environment was selected with care so that there would be space for movement, adequate light for both reading and viewing a videotape, and so that the room would be in neutral (that is, non-school) territory. The teachers were given opportunities to introduce themselves both formally and informally and to give brief descriptions of their workplaces. Also, refreshments were provided.

The COET principal investigator began the meeting by providing the participating teachers with a brief but clear description of the work which had led to COET's interest in working with teachers on the improvement of classroom management. Attention was given to the importance placed upon management by both school persons and the public. It was stressed that the CMIS effort was an attempt for research to act as a positive influence upon practice.

The next activity was the introduction of the manual (see below) to the teachers. This introduction took the form of an overview of both content and format. It was very brief (9 minutes) and each teacher received his/her own copy of the manual toward the end of the presentation.

The teachers were then asked to group themselves at tables according to the grade levels they would be teaching: first and second

grade teachers together, third and fourth grades together, and fifth and sixth grades together. Three COET staff members, all female, assumed responsibility for discussing the manual contents with the teachers. Rather than have one staff member work with only one group of teachers, the staff members each took responsibility for one section of the manual (planning, behavior management, or instructional management) and rotated among the three groups according to a prearranged time plan. This activity continued for approximately 2 hours with staff members reminding teachers that they could move to the refreshment table as they wished. Also, there were natural breaks as the staff members rotated from one group to another. During the 2 hours of attention to the manual, there was a high degree of "on task" participation by teachers. Only two teachers were observed to demonstrate any significant degree of inattention or off task behavior. (It should be noted that two treatment teachers did not attend the workshop. These teachers received the manual by hand delivery the day following the workshop and were urged to read it carefully before the first day of school.)

The written narratives of the workshop procedures note that the three COET staff members elicited varying degrees of participation when they interacted with the three teacher group. One staff member used more of a lecture format, another used a mixture of lecture/discussion, and a third used mainly discussion. (It is not clear if this variation was a consequence of the staff members' understanding of the task, personal style, or if it was a natural occurrence due to the nature of the content under consideration. In any case, there appeared to be no effect on the subsequent behavior of the teachers in terms of the degree to which the three bodies of information were implemented in their

classroom settings.) When dicussion occurred, it tended to follow a pattern. The initial stimulus for discussion was generally an expectation for practice expressed by COET staff (e.g., a prescription for handling disruptive behavior). Teachers generally responded to this expectation either by providing problems from their experiences that related to the expectation or by relating prior experiences which were not problem-oriented.

At this time the group was reconvened as a whole and a COET staff member explained in some detail the data collection techniques to be used, the "booster" workshop which would be held in 4 weeks (see below), and the interviews which would be conducted toward the end of the study. Attention was also given to instructing the teachers not to share their manuals with colleagues so that the integrity of the study could be preserved. There were several questions regarding the presence of observers in the classroom; the COET staff member responded to these questions by providing assurance to the teachers in ways that demonstrated an understanding of classroom contexts and teacher concerns.

After the 2 hours of grade-level-designated group discussion, a videotape was presented to illustrate desirable classroom management techniques. This videotape of a teacher and a group of students in a simulated classroom setting demonstrated a number of the management techniques which had been discussed in the small groups. During the showing of the tape, five teachers appeared to be taking many notes and seven others were seen to write in their COET manuals.

At the conclusion of the first workshop, a COET staff member thanked the teachers for their participation, wished them well in the

beginning of their school year, and the teachers left individually or in small groups talking animatedly about the beginning of school.

Treatment Manual

Limited attention has been given thus far to the manual (Evertson, Emmer, Clements, Sanford, Worsham, & Williams, Note 2) which served as the content vehicle for the workshop discussed above. The manual was designed to provide a number of ways for teachers (and others) to understand the principles, concepts, and behaviors considered to be desirable in managing an elementary classroom. This document presents prescriptions for classroom management in 11 areas: readying the classroom, planning rules and procedures, consequences, teaching rules and procedures, beginning-of-school activities, strategies for potential problems, monitoring, stopping inappropriate behavior, organizing instruction, student accountability, and instructional clarity. For each prescription a rational is presented, guidelines or specific strategies are suggested, activities are described, and case studies are included. In addition, checklists are provided so that teachers can attend to the degree to which they are implementing the suggestions and prescriptions. The material is color coded so that the various formats (e.g., checklist, case study, etc.) can be readily identified. The writing is clear, straightforward, and precise, and demonstrates a sensitive understanding of the complexities of teaching and learning in school settings. (The manual also included several cartoons portraying the dilemmas often faced by teachers. These were subsequently deleted from the published document.)

Booster Workshop

The third component of the treatment was a so-called "booster" workshop that occurred outside of school hours during the fifth week of school. Teachers were given the opportunity to attend either an after-school session or a Saturday session. The content and processes of these workshops were selected and designed to reinforce the prescriptions presented during the first workshop and were planned with the teachers' reactions to the first workshop in mind. The telephone interviews noted above were used to elicit opinions from participants about what they would most like to have happen (content and process) in this second workshop. Consequently, the second workshop focused upon problems identified by the teachers, used processes which were heavily discussion-oriented, and concentrated upon teacher experiences with the manual prescriptions as well as related school issues.

It should be noted that later in the school year, control group teachers were also given the opportunity to attend a workshop similar to the ones described above and were also given copies of the manual for their use. This consideration of the control group was greatly appreciated by its members as well as by school system officials.

Findings

As noted above, there were four purposes to the present inquiry. The first, documentation of the treatment, has been accomplished within the scope of this paper in the discussion immediately above. The second and third will be discussed here. The paper will conclude with speculations regarding the CMIS treatment in terms of informing staff development activities.

As noted above, a questionnaire based upon a content analysis of the manual used in the treatment was administered to both treatment and

control groups teachers. Questionnaire items were then divided into three constructs: planning, behavioral management, and instructional management. Teachers were ranked through a Q-sort technique on each of these constructs and ultimately given a score (ranging from 1 to 5) representing their knowledge on that construct relative to the other teachers. A t-test conducted between the two groups' scores revealed that there was no statistically significant difference between the two groups in terms of their knowledge of classroom management techniques (see Table 1). It is possible to state, then, that the groups entered the CMIS study with about the same level of intellectual understanding of classroom management.

Pearson correlations were computed between the three knowledge variables and measures of classroom behaviors. There was a much greater relationship between prior knowledge and classroom behaviors for treatment teachers than for control teachers. That is, the behavior of treatment teachers was more likely to reflect their knowledge of classroom management than the behavior of control teachers. For example, the treatment teachers' knowledge of behavior management prior to the workshop was related positively to a variety of classroom behaviors: consideration of attention spans in lessons ($r = .46$), high student success rate ($r = .67$), signalling ($r = .39$) and rewarding appropriate behavior ($r = .60$), effective monitoring ($r = .48$), citing rules and procedures to stop disruptive behaavior ($r = .49$), and attending to disruptions rather than ignoring them ($r = .51$). For control teachers, most of these behaviors showed only weak nonsignificant relationships to knowledge of behavioral management.

This finding suggests that there is a very complicated relationship between knowledge of classroom management and management behavior. For the control teachers, the generally weak relationship between knowledge and behavior suggests that for these teachers, knowledge rarely was put into practice. In the case of the treatment teachers, however, the much stronger relationship between knowledge and behavior suggests that the treatment may have enabled the teachers to actualize their already existing knowledge in classroom settings. Possibly teachers in the experimental group with the most initial knowledge benefited most from the treatment, because they were ready for it and more likely to see its applications for their classrooms. (For details of the statistical differences between the two groups of teachers in relation to observed management behaviors see Emmer, Sanford, Evertson, Clements, & Martin, Note 1.)

In order to assess the effect of the second workshop on the behavior of treatment teachers, a repeated measures analysis of variance was conducted on measures of classroom behavior with group membership (treatment versus control) as one independent variable and time of year as a second repeated measures independent variable. Time of year was divided into week 1, weeks 2 through 4, and weeks 5 through 8. Data analyses indicated an almost complete absence of interactions between group membership and time of year, indicating that the difference between treatment and control groups was relatively constant over the first 8 weeks of the study. This implies that the second workshop, which occurred during the fourth week of school, did not increase treatment teachers' implementation of the suggested management behaviors. This finding, of course, raises some question about the

necessity to provide such reinforcement opportunities. It is important to acknowledge, however, that the second workshop may have supported already existing changes because most of the behavior that had been observed in the treatment teachers subsequent to the first workshop persisted. The second workshop, though, did not increase most of the differences between the treatment and control teachers.

The CMIS study procedures allowed for the ranking of treatment teachers according to classroom management skills. To obtain this ranking, teachers' classes were first ranked on each of four student behaviors: amount of disruptive behavior, amount of inappropriate behavior, on task engagement, and engagement in off-task unsanctioned activities. These four rankings were then summed for each teacher to give an overall ranking of student cooperation, which was considered to be a good indicator of teacher management skills. When one examines the treatment teachers who fall into the lower rankings and examines the narratives of the treatment workshops it is interesting to note that one of the teachers is noted as not attending to the procedures, one did not attend the first workshop, and two were not at the reinforcement workshop. A paradoxical finding here, however, is that of the two teachers who did not attend the first workshop, one scored highest and the other scored lowest on the summed rankings! Interviews with these teachers revealed that the teacher who scored highest had devoted a great deal of time to studying the manual prior to the first days of the school year.

In the CMIS study, the control teachers were also ranked on their behavior management skills. The teachers who ranked lowest on management skills were chosen to receive the manual and a workshop

before the Christmas holidays. For the purposes of comparing the effects of the before-school workshop and the reinforcement workshop 4 weeks later with the mid-year workshop, the control teachers who received the mid-year workshop were compared with those treatment teachers who ranked lowest on management skills. These two groups of teachers (the bottom half of the control group and the bottom half of the treatment group) are only roughly comparable but may provide some insight into the value of the two workshops. For this comparison, a repeated measures analysis of variance was conducted on indicators of both teacher and student behavior with group membership (bottom half of control group versus bottom half of treatment group on composite ranking of management skills) as one independent variable and time of year as a second repeated measures independent variable. Time of year was divided into weeks 5 and 8 (prior to the mid-year workshop) and January and February observations (after the mid-year workshop). Results indicated that the mid-year workshop was not effective in bringing up the behavior of the control teachers to that of the treatment teachers who received the two workshops at the beginning of the year.

In summary, then, it can be said that (a) prior to the treatment there was no statistically significant difference between experimental and control teachers' knowledge of classroom management as defined by the CMIS study, (b) the experimental teachers exhibited significantly more desired classroom management behaviors than did control teachers, (c) the reinforcement workshop appeared to have little or no effect on treatment teachers' classroom management other than, perhaps, maintenance, and (d) four of the treatment teachers who were ranked

lowest in terms of exhibiting desired behaviors either missed part of the treatment or had been observed as being inattentive during part of the treatment.

Speculations Regarding the CMIS Treatment as Staff Development

Clearly, the CMIS treatment was effective. In terms of planning and implementing staff development programs, it is important to attempt to understand why. Several propositions are offered for consideration.

1. The CMIS treatment dealt with an issue which is endemic in school settings. It is rare that a school-related group does not list classroom management (often phrased as "discipline" or "control") as an important concern of teachers and lay persons alike. Although the CMIS treatment could be considered to violate one of the recurring themes of recent staff development work, situation-specificity (Bentzen, 1974), it can be argued that issues regarding classroom management are situation specific in that they persist across school situations and, therefore, can be hypothesized as being specific to most classrooms.

2. The treatment took place in "neutral" territory. There is a point of view which suggests that it is necessary to provide a time and space "cushion" to some staff development activities. That is, it is desirable to conduct growth opportunities away from the physical and psychological press of the school setting (Devaney & Thorne, 1975).

3. The CMIS treatment included provision for self-support in the form of a manual. In the now-classic study by Gross, Giaquinta, and Bernstein (1971), of an attempt to alter the role of the teacher, the important function of support materials is described. The CMIS manual acted as support material that was always available to treatment

teachers if they chose to refer to it. This reference guide, in all probability, was a major focusing device for treatment teachers.

4. The CMIS treatment was relatively closely linked to "business as usual." There is nothing exotic or even dramatically new about giving attention to classroom management, as noted above. In fact, the issue of management is part of what Sarason (1972) called institutional regularities. In other words, there are certain norms and activitier which are constant, ones which are given attention as a matter of course. Management is one of these. Furthermore, the CMIS treatment did not require drastic changes in the teachers' daily routines or those of the school personnel. This is in dramatic contrast with, for example, the "new mathematics" which was a much larger scale innovation and one which demanded dramatic reorientation on the parts of teachers and other school persons. Further, classroom management has been documented as being one area of school life upon which there is wide agreement as to the need for improvement (Byrd, 1981).

5. The CMIS treatment was planned and implemented by persons very familiar with life in classrooms. The documentation of the treatment reveals that there was considerable attention given to ensuring that both the workshops and the manual reflected the realities of schools. The workshop examples, the videotape of a teacher and students, the specific references to actual events in classes all demonstrated the planners' knowledge of the ways students and teachers go about teaching and learning. Griffin and Lieberman (1974) noted that one of the most powerful variables in promoting school change was the innovator's demonstration of knowledge of the system he or she desired to change.

In addition to the conclusions about the CMIS treatment presented above, certain questions were raised as a consequence of this related study. These questions can be posed as follows:

1. Why was it not possible to raise the classroom management behaviors of the control teachers who received the mid-year workshop to the level of those of the treatment teachers as both groups were offered approximately the same treatment? Is this a function of the time of the treatment? Is is a function of the socialization of teachers and students during the first months of the school year?

2. Why did the treatment teachers who scored low at the beginning of the study continue to do so despite the reinforcement opportunity and the readily available manual? Is it possible that the orientation to management used by CMIS is not one that some teachers can or will adopt? Are there philosophical or practical ideas about what teaching is all about that simply do not permit the introduction and adoption of different conceptions of management? Clearly, more information is needed about what types of persons can most benefit from these types of experiences.

3. What conditions prevent teachers from using information they apparently already have? It was noted that the CMIS treatment teachers were no more knowledgeable about classroom management prior to treatment than were control teachers. Yet, after the treatment, treatment teachers demonstrated greater use of recommended management practices. Did the treatment sanction and support practices that were available to teachers, but unused? Did the treatment focus the knowledge for the teachers? Did the treatment clarify and make specific what had only been generalized understandings? Were prior opportunities to learn

classroom management behaviors somehow independent of the classroom setting? Would this make a difference? Is it that the treatment teachers merely gained more knowledge through the workshop and that this increase in knowledge affected their behavior? (There was no knowledge measure administered after the first workshop.)

4. Of what value are written examinations of teacher competencies when, at least in this instance, it was shown that knowledge of these competencies does not relate to their practice? When teachers (or teachers in training) can demonstrate that they have the necessary knowledge and do not engage in the knowledge-related behaviors, what gets in the way? Beliefs? Environmental constraints? Lack of support for practicing the behaviors? Perhaps the implementation of knowledge requires a degree of guided practice (similar to the COET treatment) that is not available to teachers, despite student teaching and other staff development activities.

Conclusion

This paper has dealt with the issue of an experimental study as a possible staff development strategy. It has provided a brief description of the treatment, noted its effects upon participants, linked its content to prior knowledge of participants, speculated upon the implications of the findings, and raised questions which arose as part of the investigation. By understanding not only what works in changing teachers but also beginning to raise questions about why certain attempts result in positive outcomes, we can be more secure in both our research and our development efforts.

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Table 1

Means and Standard Deviations of
Classroom Management Knowledge

Groups	Planning	Behavior Management	Instructional Management
Treatment			
Mean	3.13	2.84	2.76
S.D.	1.16	1.29	1.31
Control			
Mean	2.90	3.00	3.19
S.D.	1.44	1.20	1.04

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